

in the isotope 235 and for extraction of fissile materials from irradiated fuel rods and other equipment designated by the Secretary of Energy for purposes of this section.

(4) The term “highly-enriched uranium” means uranium enriched to or above 20 percent in the isotope 235.

(5) The term “low-enriched uranium” means uranium enriched below 20 percent in the isotope 235.

(6) The term “proliferation-attractive”, in the case of fissile materials and radiological materials, means quantities and types of such materials that are determined by the Secretary of Energy to present a significant risk to the national security of the United States if diverted to a use relating to proliferation.

(Pub. L. 108–375, div. C, title XXXI, § 3132, Oct. 28, 2004, 118 Stat. 2166; Pub. L. 109–364, div. C, title XXXI, § 3113, Oct. 17, 2006, 120 Stat. 2504; Pub. L. 112–239, div. C, title XXXI, § 3118, Jan. 2, 2013, 126 Stat. 2173; Pub. L. 115–232, div. C, title XXXI, § 3114, Aug. 13, 2018, 132 Stat. 2290.)

#### CODIFICATION

Section was enacted as part of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and not as part of the Atomic Energy Defense Act which comprises this chapter.

#### AMENDMENTS

2018—Subsec. (f)(5). Pub. L. 115–232, § 3114(1), (2), redesignated par. (6) as (5) and struck out former par. (5). Prior to amendment text of par. (5) read as follows: “Not later than 30 days after the receipt of an amount contributed under paragraph (1), the Secretary of Energy shall submit to the congressional defense committees a notice specifying the purpose and value of the contribution and identifying the person who contributed it. The Secretary may not use the amount until 15 days after the notice is submitted.”

Subsec. (f)(6), (7). Pub. L. 115–232, § 3114(2), (3), redesignated par. (7) as (6) and substituted “December 31, 2023” for “December 31, 2018”. Former par. (6) redesignated (5).

2013—Subsec. (f)(2). Pub. L. 112–239, § 3118(a), amended par. (2) generally. Prior to amendment, par. (2) related to programs covered and listed certain international programs within the Global Threat Reduction Initiative.

Subsec. (f)(7). Pub. L. 112–239, § 3118(b), substituted “December 31, 2018” for “December 31, 2013”.

2006—Subsecs. (f), (g). Pub. L. 109–364 added subsec. (f) and redesignated former subsec. (f) as (g).

#### ACCELERATION OF REPLACEMENT OF CESIUM BLOOD IRRADIATION SOURCES

Pub. L. 115–232, div. C, title XXXI, § 3141, Aug. 13, 2018, 132 Stat. 2303, provided that:

“(a) GOAL.—The Administrator for Nuclear Security shall ensure that the goal of the covered programs is eliminating the use of blood irradiation devices in the United States that rely on cesium chloride by December 31, 2027.

“(b) IMPLEMENTATION.—To meet the goal specified by subsection (a), the Administrator shall carry out the covered programs in a manner that—

“(1) is voluntary for owners of blood irradiation devices;

“(2) allows for the United States, subject to the review of the Administrator, to pay up to 50 percent of the per-device cost of replacing blood irradiation devices covered by the programs;

“(3) allows for the United States to pay up to 100 percent of the cost of removing and disposing of cesium sources retired from service by the programs; and

“(4) replaces such devices with x-ray irradiation devices or other devices approved by the Food and Drug Administration that provide significant threat reduction as compared to cesium chloride irradiators.

“(c) DURATION.—The Administrator shall carry out the covered programs until December 31, 2027.

“(d) REPORT.—Not later than 180 days after the date of the enactment of this Act [Aug. 13, 2018], the Administrator shall submit to the appropriate congressional committees a report on the covered programs, including—

“(1) identification of each cesium chloride blood irradiation device in the United States, including the number, general location, and user type;

“(2) a plan for achieving the goal established by subsection (a);

“(3) a methodology for prioritizing replacement of such devices that takes into account irradiator age and prior material security initiatives;

“(4) in consultation with the Nuclear Regulatory Commission and the Food and Drug Administration, a strategy identifying any legislative, regulatory, or other measures necessary to constrain the introduction of new cesium chloride blood irradiation devices;

“(5) identification of the annual funds required to meet the goal established by subsection (a); and

“(6) a description of the disposal path for cesium chloride sources under the covered programs.

“(e) ASSESSMENT.—The Administrator shall submit an assessment to the appropriate congressional committees by September 20, 2023, of the results of the actions on the covered programs under this section, including—

“(1) the number of replacement irradiators under the covered programs;

“(2) the life-cycle costs of the programs, including personnel training, maintenance, and replacement costs for new irradiation devices;

“(3) the cost-effectiveness of the covered programs;

“(4) an analysis of the effectiveness of the new irradiation devices’ technology; and

“(5) a forecast of whether the Administrator will meet the goal established in subsection (a).

“(f) DEFINITIONS.—In this section:

“(1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term ‘appropriate congressional committees’ means—

“(A) the Committee on Appropriations, the Committee on Armed Services, and the Committee on Energy and Commerce of the House of Representatives; and

“(B) the Committee on Appropriations, the Committee on Armed Services, the Committee on Energy and Natural Resources, and the Committee on Health, Education, Labor, and Pensions of the Senate.

“(2) COVERED PROGRAMS.—The term ‘covered programs’ means the following programs of the Office of Radiological Security of the National Nuclear Security Administration:

“(A) The Cesium Irradiator Replacement Program.

“(B) The Off-Site Source Recovery Program.”

#### “CONGRESSIONAL DEFENSE COMMITTEES” DEFINED

Congressional defense committees has the meaning given that term in section 101(a)(16) of Title 10, Armed Forces, see section 3 of Pub. L. 108–375, Oct. 28, 2004, 118 Stat. 1825. See note under section 101 of Title 10.

## § 2570. Silk Road Initiative

### (a) Program authorized

(1) The Secretary of Energy may carry out a program, to be known as the Silk Road Initiative, to promote non-weapons-related employment opportunities for scientists, engineers, and technicians formerly engaged in activities to develop and produce weapons of mass destruction in Silk Road nations. The program should—

(A) incorporate best practices under the Initiatives for Proliferation Prevention program; and

(B) facilitate commercial partnerships between private entities in the United States and scientists, engineers, and technicians in the Silk Road nations.

(2) Before implementing the program with respect to multiple Silk Road nations, the Secretary of Energy shall carry out a pilot program with respect to one Silk Road nation selected by the Secretary. It is the sense of Congress that the Secretary should select the Republic of Georgia.

**(b) Silk Road nations defined**

In this section, the Silk Road nations are Armenia, Azerbaijan, the Republic of Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

**(c) Funding**

Of the funds authorized to be appropriated to the Department of Energy for nonproliferation and international security for fiscal year 2005, up to \$10,000,000 may be used to carry out this section.

(Pub. L. 108-375, div. C, title XXXI, § 3133, Oct. 28, 2004, 118 Stat. 2168.)

CODIFICATION

Section was enacted as part of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and not as part of the Atomic Energy Defense Act which comprises this chapter.

**§ 2571. Nuclear Nonproliferation Fellowships for scientists employed by United States and Russian Federation**

**(a) In general**

(1) From amounts made available to carry out this section, the Administrator for Nuclear Security may carry out a program under which the Administrator awards, to scientists employed at nonproliferation research laboratories of the Russian Federation and the United States, international exchange fellowships, to be known as Nuclear Nonproliferation Fellowships, in the nuclear nonproliferation sciences.

(2) The purpose of the program shall be to provide opportunities for advancement in the nuclear nonproliferation sciences to scientists who, as demonstrated by their academic or professional achievements, show particular promise of making significant contributions in those sciences.

(3) A fellowship awarded to a scientist under the program shall be for collaborative study and training or advanced research at—

(A) a nonproliferation research laboratory of the Russian Federation, in the case of a scientist employed at a nonproliferation research laboratory of the United States; and

(B) a nonproliferation research laboratory of the United States, in the case of a scientist employed at a nonproliferation research laboratory of the Russian Federation.

(4) The duration of a fellowship under the program may not exceed two years, except that the Administrator may provide for a longer dura-

tion in an individual case to the extent warranted by extraordinary circumstances, as determined by the Administrator.

(5) In a calendar year, the Administrator may not award more than—

(A) one fellowship to a scientist employed at a nonproliferation research laboratory of the Russian Federation; and

(B) one fellowship to a scientist employed at a nonproliferation research laboratory of the United States.

(6) A fellowship under the program shall include—

(A) travel expenses; and

(B) any other expenses that the Administrator considers appropriate, such as room and board.

**(b) Definitions**

In this section:

(1) The term “nonproliferation research laboratory” means, with respect to a country, a national laboratory of that country at which research in the nuclear nonproliferation sciences is carried out.

(2) The term “nuclear nonproliferation sciences” means bodies of scientific knowledge relevant to developing or advancing the means to prevent or impede the proliferation of nuclear weaponry.

(3) The term “scientist” means an individual who has a degree from an institution of higher education in a science that has practical application in the nuclear nonproliferation sciences.

**(c) Funding**

Amounts available to the Department of Energy for defense nuclear nonproliferation activities shall be available for the fellowships authorized by subsection (a).

(Pub. L. 108-375, div. C, title XXXI, § 3134, Oct. 28, 2004, 118 Stat. 2169.)

CODIFICATION

Section was enacted as part of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and not as part of the Atomic Energy Defense Act which comprises this chapter.

PROGRAM ON SCIENTIFIC ENGAGEMENT FOR  
NONPROLIFERATION

Pub. L. 112-239, div. C, title XXXI, § 3122, Jan. 2, 2013, 126 Stat. 2176, as amended by Pub. L. 113-66, div. C, title XXXI, § 3125, Dec. 26, 2013, 127 Stat. 1063; Pub. L. 114-328, div. C, title XXXI, § 3137(b), Dec. 23, 2016, 130 Stat. 2771, provided that:

“(a) PROGRAM REQUIRED.—

“(1) SCIENTIFIC ENGAGEMENT.—The Secretary of Energy, acting through the Administrator for Nuclear Security, shall carry out a program on scientific engagement in countries selected by the Secretary for purposes of the program to advance global nonproliferation and nuclear security efforts.

“(2) ELEMENTS.—The program under paragraph (1) shall include the following elements:

“(A) Training and capacity-building to strengthen nonproliferation and security best practices.

“(B) Engagement of scientists of the United States with foreign counterparts to advance nonproliferation goals.

“(3) DISTINCT PROGRAM.—The program required by this subsection shall be a distinct program from the Global Initiatives for Proliferation Prevention program.